

V.—New Mammals from French Indo-China and Siam.

By HERBERT C. ROBINSON and C. BODEN KLOSS.

IN this paper are described most of the new forms obtained by one of us during a visit to South Annam and Cochin China in 1918, others secured by our collector during a journey down the Mekong River in 1920, and two races of squirrels obtained at earlier dates in Siam and Cambodia.

1. *Tupaia glis cochinchinensis*, subsp. n.

Rather smaller than *T. g. concolor*, Bonhote, of South Annam, browner and less olivaceous, being much more richly coloured—the buff element in the pelage of *concolor* being everywhere replaced by deep ochraceous buff (almost ochraceous orange).

Darker and more richly coloured also than *T. g. cambodiana*, Kloss, from the coast of Cambodia, which is olivaceous on the shoulders with a buffy neck-stripe and less rusty on the rump. Mammæ 3—3=6, as in both the others.

T. g. cochinchinensis is at times profusely blackened on the posterior back, as also is *T. g. concolor*.

Type.—Adult female (skin and skull) collected at Trang-bom, 30 miles east of Saigon, Cochin China, on 1st June, 1918, by C. Boden Kloss. No. 3622/CBK.

Specimens examined.—Five from the type-locality compared with ten examples of *concolor* and seven of *cambodiana*.

For measurements see table on p. 89.

2. *Tupaia dissimilis annamensis*, subsp. n.

Like *T. d. dissimilis* (Ellis, in Grey) of Pulo Condore off the south-east coast of Cochin China, but the whitish ocular borders and neck-stripes more distinct; as a series less suffused with rusty above and on the tails, which are also distinctly darker beneath, *i. e.*, blacker.

Upper parts a grizzle of black and buff, darkest on the head and suffused with ochraceous tawny on the rump: feet finely grizzled black and buff.

Under parts and inner sides of limbs buff to cream-colour. Tail coarsely annulated buff and black, the latter in excess; the lower median line dull buffy. Mammæ 3—3=6.

The skull is short-snouted, of the kind figured as *chinensis* and *cuyonis* by Lyon (Proc. U.S. Nat. Mus. xlv. 1913, pl. viii. fig. 1, pl. ix. fig. 1).

Type.—Adult male (skin and skull) collected at Dabau, South Annam, 650 ft., on 14th March, 1918, by C. Boden Kloss. No. 3204/CBK.

Specimens examined.—Four from the type-locality compared with twenty from Pulo Condore.

Remarks.—The difference between this and the typical race is very slight; but taken as a series the twenty island-animals are much more ferruginous.

It appears necessary to regard *T. dissimilis* as a distinct species, since its representative in Annam occurs side by side with *concolor*, which is undoubtedly only a race of *T. glis*.

For measurements see table on p. 89.

3. *Crocidura indochinensis*, sp. n.

Very much smaller and darker than *C. fuliginosa*, Blyth (type compared).

Viewed with the head pointing to the left and the light from the front: above deep neutral grey, the upper portion of the hairs warm clove-brown—the general effect being greyish clove-brown, slightly grizzled; beneath dark mouse-grey. With the head pointing to the light the under body appears frosted, *i. e.*, dark grey suffused with silvery. A few brownish hairs on the feet. Tail paler below than above, clad beneath with short scattered silvery hairs: a few longish hairs near the base.

External measurements taken in the flesh:—

Head and body 59 (?) mm.; tail 50; hind foot 12·2; ear 9.

Skull: greatest length 17·2; front of incisors to posterior extremity of skull 17·7; basal length 15·1; palatal length 6·9; maxillary tooth-row to tip of incisors 7·4; breadth of rostrum between lachrymal foramina 3; greatest breadth of palate-expansion outside molars 5·5; mastoid breadth 8·1; length of mandible including incisors 10·8.

Type.—Adult male (skin and skull) collected at Dalat, Langbian Plateau, South Annam, 5000 ft., on 7th April, 1918, by C. Boden Kloss. No. 3359/CBK. The only specimen obtained.

Species.	Sex.	H. & B.	T.	H.f.	E.	Greatest length.	Basal length.	Palatal length.	Upper molar row (alveoli).	Tip of premaxillaries to lachrymal notch.	Rostral breadth at diastema.	Interorbital breadth.	Zygomatic breadth.	Remarks.
<i>Tupaia glis cochinchinensis</i> ...	♀	188	182	47	18	53.3	49	28	16.2	22.7	7.7	15.2	27.2	3622 CBK.
<i>Tupaia dissimilis annamensis</i> ..	♂	180	182	41	15.5	49	46	25.3	15.1	19.5	6.8	14.7	25.2	3204 CBK.

4. *Ratufa bicolor smithi*, subsp. n.

A large race of *R. bicolor* (Sparmm.), differing from the typical form in having the back almost entirely buffy, the tail black, and the yellow of the limbs sharply margined.

Below antimony-yellow to warm buff extending over the sides of the head and neck to the bases of the ears, over the upper part of the fore-limbs from thumb to shoulder and frequently over the upper side of the hind feet.

Eyelids, a long moustachial stripe passing through the roots of the vibrissæ, nose, lips, and two spots on the chin black.

Remainder of pelage varying from black to brown, except for a brownish-buff patch between the ears and the whole of the dorsal area from nape to rump, where all the hairs have long buffy tips; generally, but not always, there is a line of clear black between the buff of the upper and lower parts. The buff-tipped hairs extend over part of the thighs, but rarely to shoulders or fore-limbs.

Feet and tail generally clear black, though sometimes the tail-hairs are tipped with rusty brown, while the extremity bleaches to a pale colour.

There is a good deal of variation in the yellow of the back: in fresh pelage it is buff, but it becomes chamois-coloured, and in very abraded examples disappears altogether. The yellow of the sides of the face and neck and of the throat is sometimes a little paler than elsewhere.

Type.—Adult female (skin and skull) collected on the Langbian Peaks, South Annam, 6000 ft., on 22nd April, 1918, by C. Boden Kloss. No. 3501/CBK.

Specimens examined.—Three from the type-locality; one from Arbre Broyé, 5400 ft., three from Dalat, 4500 ft., and two from Dran, 3000 ft., Langbian Mountains.

Remarks.—The general colour and pattern of this animal, except for the heavy buff mantle, are those of the Javan and Continental black-and-tan squirrels; the yellow back allies it specially to the typical *bicolor*, while in the black tail it is like other mainland forms. It emphatically shows that the latter are only subspecies of *Ratufa bicolor*.

The largest example obtained has a skull length and breadth of 79 and 50 mm. respectively.

(Named after my companion in Annam, Dr. Malcolm Smith, C.B.K.)

For measurements see table on p. 93.

5. *Callosciurus ferrugineus williamsoni*, subsp. n.

Above: head and body burnt-sienna to orange-rufous; a few black-tipped hairs on the head and ears, but nowhere any grizzled areas. Feet like limbs. Base of fur on body and limbs blackish.

Chin and sides of neck ochraceous orange; remaining under parts orange-rufous washed with bay to deep bay sharply margined from the colour of the sides, etc. Even in the palest-bellied examples the margination can be traced. Genital region partly orange-rufous. Tail with proximal half bay to chestnut, but the hairs at their bases and the whole of the distal part of the tail ochraceous orange.

Type.—Adult female (skin and skull) obtained at Khet Don Heing, northern bank of the Mekong just below Xieng Khan on the Paklai loop, on 31st January, 1920, by H. C. Robinson and C. Boden Kloss's collector. No. 7183/S.

The type is an intermediate example: the extremes described above are a male and female, Nos. 7188 and 7191/S from Ban Na Tung, north bank of the Mekong just below Vien Chan (Vien Tian), on 8th February, 1920.

Specimens examined.—Seventeen from the north bank of the Mekong River between Muang Liep, lat. 18° 14' N., and Ban Manao, long. 104° E., a little south of the mouth of the Pak Sa tributary.

6. *Callosciurus ferrugineus herberti*, subsp. n.

A good deal of black on the feet and tail; chin, outer sides of head, neck, and limbs grizzled olivaceous.

Beneath ochraceous orange, slightly washed with bay on the abdomen, to bay; distinctly margined on the sides.

Above varying from burnt-sienna grizzled with black, chestnut on the rump and darkest on the median line, to rufous with the median line chestnut; a pale rufous thigh-patch. Tail ochraceous orange to chestnut much blackened; terminal portion creamy to ochraceous orange.

Type.—Adult male (skin and skull) obtained at Hup Bon, near Sriracha, S.E. Siam, on 25th July, 1915, by Mr. E. G. Herbert's collector, No. 2017/CBK. The type is the darker extreme, the paler specimen, No. 2018/CBK, has the same history and was collected on 27th July.

For measurements see table on p. 93.

7. *Callosciurus ferrugineus pierrei*, subsp. n.

Like the form inhabiting Cambodia, but decidedly darker, especially on the median area of the back, limbs not annulated or grizzled; sides of the head and muzzle dark grizzled black and ferruginous, very black in the neighbourhood of the vibrissæ. Tail with a clear pale buffy tip. Feet and hands rather lighter than the rest of the pelage, ungrizzled.

Type.—Adult (skin and imperfect skull) collected by Pierre on Phu Quoc Island, off the coast of Cambodia, in February 1874 (ex Paris Museum). Brit. Mus. No. 78, 6. 17. 27.

Measurements.—Hind foot (dry) 47.5 mm.

Skull: palatal length 23.2; diastema 13.0; upper molar row including pm⁴ (alveolar) 11.0; least interorbital breadth 19.2; zygomatic breadth 34.0; median nasal length 17.3.

8. *Callosciurus ferrugineus phanrangis*, subsp. n.

Above a grizzle of black and pale buff, blackest along the median line, the general effect being a buffy grey changing through pale buff and ivory to white on the feet. Top of muzzle and sides of head paler grey, ears brighter and more buffy, their bases at the back whitish grey.

Chin and sides of neck buffy greyish, remaining under parts cream-colour to warm buff. Tail like upper parts, but more coarsely annulated.

Type.—Adult female (skin and skull) with moderately-worn teeth, collected at Tour Cham, near Phanrang, S. Annam, on 23rd May, 1918, by C. Boden Kloss. No. 3660/CBK.

Specimens examined.—Eight from the type-locality, two taken in March and six in May.

Remarks.—This is a depauperated form of *S. f. griseimanus* (M.-Edw.), inhabiting the sterile coastal plain of Phaurang. Its range inland is limited by the forested hills, 10–20 miles to the west, where *S. f. griseimanus* occurs.

For measurements see table on p. 93.

9. *Tamiops maccllelandi laotum*, subsp. n.

Outer pale stripes interrupted on the shoulders, only the median stripe black, under parts cream-colour.

Above a fine grizzle of black and buffy, the general colour effect being brownish grey. A median dark stripe commencing behind the shoulders, bordered by greyish-buffy stripes more buffy than the head, these in turn bordered externally by ferruginous stripes speckled with black deeper than the head; below these come buff stripes, followed below by stripes the same colour as above. A buff stripe from the muzzle along the sides of the neck. Hind feet buffy, more so than the fore feet. Hairs of ears with white tips and black bases.

Below creamy, the hairs with grey bases. Tail annulated black and ochraceous, the hair tipped with pale buff.

The series varies: the most north-easterly examples are darkest and have the dark dorsal stripes most intense—in one instance the outer pair being almost black; the southernmost specimens are palish and most buffy, one especially (No. 7238/S from Ban Houei Huo Chang) practically lacking any rufous suffusion above.

Type.—Adult male (skin and skull) obtained at Pak Hin Bun, Laos, on the Mekong (lat. 17° 35' N.) on 2nd March, 1920, by H. C. Robinson and C. Boden Kloss's collector. No. 7235/S.

Specimens examined.—The type: ten specimens from between Pak Hin Bun and Ban Na Sao, 40 miles to the north-east; and four from between Pak Hin Bun and Savanaket, 60 miles down river, from the Laos bank or islands in mid-stream.

For measurements see table on p. 93.

10. *Tamiops maccllelandi moi*, subsp. n.

Like *T. m. lao*, but darker above; upper parts more suffused with ferruginous, so that, in addition to being more

Species.	Sex.	Il. & B.	T.	Il.f.	E.	Greatest length.	Condylar-basilar length.	Palatilar length.	Diastema.	Upper molar row (alveoli).	Nasal length.	Interorbital breadth.	Zygomatic breadth.	Remarks.
<i>Ratufa bicolor smithi</i>	♀	415	500	89	31	76	63	29	16.2	14	24.2	31	49	3501/CBK. Teeth moderately worn.
<i>Calloseiurus ferrugineus williamsoni</i>	♀	215	254	48	24	58	49	..	12.8	11.3	17	19.8	34	7183/S. Teeth moderately worn.
" <i>herberti</i>	♂	241	198	47	22	54.3	45.5	22.8	12	11	16	20.5	32	2107/CBK. Teeth unworn.
" <i>phanrangis</i>	♀	217	140	44	20	49	41	20	10.5	10	16	16.7	29	3660/CBK. Teeth moderately worn.
<i>Tamias macclendani laotum</i>	♂	113	95	33	13	35.8	29.5	14.1	7.9	6.3	9.3	12.5	21.5	7235/CBK. Teeth worn.
" <i>noi</i>	♂	123	112	31	13	35.6	29.3	14.2	7.9	6.9	9	12.5	21	3534/CBK. Teeth worn.

richly-coloured generally, the yellow stripes are ochraceous instead of buff, while the rump and the outer pair of dorsal stripes are a brighter brown.

Type.—Adult male (skin and skull) collected on Langbian Peaks, South Annam, 5500–6500 ft., on 25th April, 1918, by C. Boden Kloss. No. 3524/CBK.

Specimens examined.—Eight from the type-locality; two from Arbre Broyé, 5400 ft.; seven from Dalat, 4500 ft.; and two from Dran, 3000 ft., Langbian Mountains.

For measurements see table on p. 93.

11. *Rattus edwardsi milleti*, subsp. n.

Above dark brown (between bone-brown and clove-brown), darkest down the median line, paler and greyer on the limbs (dark hair-brown), and also on the sides, which are grizzled with dull buff; sides of neck rather brighter, tinged with buffy brown.

Entire lower surface and inner sides of limbs sharply margined white except for a broad hair-brown band across the ankles of the hind feet and the hair near the base of the tail.

Tail dark throughout above, paler below, but least so proximally. Feet dark, the margins and digits pale. Mammaræ 2—2=8. Pelage of the back composed of soft hairs and slender flattened spines.

Skull like that of the Malayan form *R. e. ciliatus* (Bonhote), but with interparietal longer and less straight anteriorly and bullæ larger.

Type.—Adult female (skin and skull) collected at Dalat, Langbian Plateau, S. Annam, 5000 ft., on 11th April, 1918. No. 3393/CBK.

Remarks.—At a casual glance the colour and pelage of this animal suggest relationship with the *bowersi* group of rats with ivory-coloured incisors. It has, however, nothing to do with them, but is a remarkably distinct race of *R. edwardsi*, other forms of which are *ciliatus*, mentioned above, and *setiger*, Robinson & Kloss, of Sumatra.

(Named in honour of Monsieur F. Millet, who gave me the only specimen obtained. I am greatly indebted to Monsieur Millet for assistance and hospitality during my visit to the Langbian Plateau.—C. B. K.)

For measurements see table on p. 98.

12. *Rattus sabanus revertens*, subsp. n.

Colour as in *R. sabanus vociferans* (Miller) of Peninsular Siam, but hind foot with a narrower dark median stripe. Below ivory-yellow (one ex. juv., white).

Skull with nasals longer and more truncate posteriorly, ending level with the premaxillary sutures, not pointed and falling short of them, with the frontals penetrating between the premaxillaries; fronto-parietal suture much more curved.

Type.—Male, vix ad. (skin and skull), collected at Daban, Phaurang Province, South Annam, 650 ft., on 15th March, 1918, by C. Boden Kloss. No. 3219/CBK.

Specimens examined.—Four from the type-locality.

Remarks.—This form has a closer resemblance to *R. s. vociferans* than to the geographically-intermediate and more adjacent race *R. v. herberti*, Kloss, of East Siam.

For measurements see table on p. 98.

13. *Rattus moi*, sp. n.

Pelage very soft, close, and velvety, owing to the total absence of spines and piles; on this account not blackened as in *Rattus surifer koratensis*, Kloss, which occurs in the same region; also more richly coloured above.

Upper parts ochraceous orange, brightest on the middle-back, lightest on sides and fore limbs; head tinged with greyish wood-brown; median line and mid-back, where many of the hairs have dark tips, slightly specked with blackish.

Under parts of body and limbs white, sharply margined, and narrowly continuous to the feet; muzzle brown, lips and post-vibrissal area white. Tail bicoloured with a white tip, scutes exceedingly small, 19–20 rings to the centimetre. Extreme base of tail below clad with hair like that above. Skull of the same general type as that of *R. s. koratensis*, but separable by narrower infraorbital foramina, owing to the more vertical position of the plates, larger interparietal, much larger palatal foramina, and less truncate interpterygoid space; rostrum markedly shallower, but the incisors more prominent laterally.

Type.—Adult female (skin and skull) collected at Arbre Broyé, Langbian Mountains, South Annam, 5400 ft., on 13th May, 1918, by C. Boden Kloss. No. 3588/CBK.

Specimens examined.—Two from the type-locality.

For measurements see table on p. 98.

14. *Rattus bukit champa*, subsp. n.

Much darker than *R. b. bukit* (Bonhote) of the Malay Peninsula; bullæ much larger. Nearest in colour to the dark form from the lowlands of Java, *R. b. temniacki*, Kloss, but posterior termination of nasals broader, palatal foramina and bullæ still larger.

Not so bright as *R. b. marinus*, Kloss, from the islands Koh Chang and Koh Kut, S.E. Siam, the rostrum shorter, the interpterygoid space narrower, and the bullæ larger.

Type.—Aged female (skin and skull) collected on the Langbian Peaks, South Annam, 6000–7000 ft., on 20th April, 1920, by C. Boden Kloss. No. 3474/CBK.

Specimens examined.—Thirty-four from the type-locality; four from Arbrey Broyé, 5400 ft.; thirty-five from Dalat, 4500 ft.; two from Dran, 3000 ft., Langbian Mountains; and three from Daban, Phanrang Province, South Annam, 650 ft.

15. *Rattus blythi mekongis*, subsp. n.

Externally like *R. blythi** from North Tenasserim and Western Siam, but the skull with the nasals broader posteriorly, the interparietal longer and the interpterygoid space broader.

Type.—Adult male (skin and skull) obtained at Bak Mat on the Mekong River, Laos (lat. 18° 53' N.), on 20th January, 1920, by H. C. Robinson and C. Boden Kloss's collector. No. 7172/S.

Specimens examined.—The type and another specimen from Muang Liep, 25 miles down river; compared with seven examples of *R. blythi* from near Raheng, W. Siam.

Remarks.—We are not in a position to say whether *Rattus blythi* is a distinct species or only a form of an older-named species; but to show the intimate relationship of the Mekong animal with that from Schwegyin we have referred it to *blythi*.

For measurements see table on p. 98.

16. *Rattus cremoriventer langbianis*, subsp. n.

Most nearly resembling *R. c. cretaceiventer*, Robinson & Kloss, of Java; but a little duller in colour and the tail more finely ringed.

* *Rattus blythi*, Kloss (*Mus cinamomeus*, Blyth, nom. præocc.), Rec. Ind. Mus. xiii. 1917, p. 8; id. Journ. Nat. Hist. Soc. Siam, iv. 1921, p. 65.

Skull with interpterygoid space and basioccipital a little narrower; bullæ a little more dilated; foramen magnum nearly circular in outline, not flattened and oval.

Type.—Adult male (skin and skull) collected on Langbian Peaks, South Annam, 5500–6500 ft., on 28th April, 1918, by C. Boden Kloss. No. 3556/CBK.

Specimens examined.—Two from the type-locality and three from Dalat, Langbian Mountains, 4500 ft.

17. *Rattus molliculus*, sp. n.

Superficially resembling immature examples of the Annam country rat, *Rattus rattus sladeni* (Anderson), but the upper parts totally devoid of spines, the feet paler, and the under parts varying from pure white to buffy white with visible grey bases to the hairs. Mammæ 2—3=10 instead of 3—3=12 as in *sladeni*.

Skull remarkably like that of *R. r. sladeni*, but much less robust, especially more slender throughout. Infraorbital foramina larger, most noticeable when viewed from above; bullæ larger and more dilated and more nearly paralleled.

Above "sayal" brown to buffy brown (*Ridgway*), streaked with blackish, paler and greyer on sides of head and body and on the limbs. Hind feet white, fore feet only a little paler than the forearms.

Under parts varying from fur with grey bases and creamy tips in the older animals to pure white in the younger.

Tail dark throughout, but generally clad beneath proximally with short silvery hairs: about 13 rings to the centimetre at mid-length.

Type.—Female vix ad. (skin and skull), collected at Daban, Phanrang Province, South Annam, 650 ft., on 23rd March, 1918, by C. Boden Kloss. No. 3267/CBK.

Specimens examined.—Seven from the type-locality, one from Ban Na Kham, 1150 ft., North Siam (27 miles east of Outeradit), and one from Ban Tuoi, Laos, just below Pou Pissai on the Mekong.

Remarks.—Though superficially so like immature *R. rattus*, this animal has nothing to do with that species and, knowing no other to which to refer it, we must regard it as quite distinct.

For measurements see table on p. 98.

Species.	Sex.	H. & B.	T.	H.f.	E.	(Greatest length.	Condylar length.	Diastema.	Up per molar row (alveoli).	Length of palatal foramina.	Length of nasals.	Combined nasal breadth.	Zygomatic breadth.	Remarks.
<i>Neotus edwardsi milleti</i> ,	♂	256	308	53	31	59	51	15.7	10.2	9.0	22.6	6.5	26.1	3393/CBK. Teeth moderately worn.
" <i>sabanus revertens</i>	♂	223	238*	45	32	54.7	45	13.3	9.9	7.3	21.3	6.3	23.5	3219/CBK. Teeth slightly worn.
" <i>moi</i>	♀	160	160	40	28	43.6	36.3	12.1	6.8	6.9	15.8	4.2	18.5	3588/CBK. Teeth moderately worn.
" <i>bukit champa</i> ,	♀	154	188	28	21	39.5	33.4	10.2	6.5	7.0	15.0	4.4	18.8	3474/CBK. Teeth much worn.
" <i>blythi mekongis</i>	♂	136	208	29	22	39.4	33.0	10.3	6.1	7.0	15.5	4.0	17.9	7172/S. Teeth well worn.
" <i>cremoriventer liangbianis</i> ,	♂	125	175	26	20	34.5	28.2	8.9	5.8	5.8	11.5	3.9	16.3	3556/CBK. Teeth slightly worn.
" <i>molicthus</i>	♀	153	170	32	22	38.1	32.2	9.5	7.0	7.0	13.0	4.0	17.5	3267/CBK. Teeth not worn.
<i>Tantatus thai annamensis</i>	♂	78	66	16	15	22.3	20.0	6.1	3.9	5.0	8.1	2.4	11.0	3391/CBK. Teeth not worn.

* Imperfect.

18. *Tautatus thai annamensis*, subsp. n.

Like *T. t. thai*, Kloss*, of Western Siam, but smaller and darker.

Pelage spineless; above a grizzle of black and buff or ochraceous buff, much duller and more blackened than in *T. t. thai*; limbs and sides of head greyish; below deep neutral grey, the hairs with white tips, the effect being silvery. Feet white. Tail dark above, pale beneath.

Type.—Adult male (skin and skull), collected at Dalat, Langbian Plateau, South Annam, 4500 ft., on 11th April, 1918, by C. Boden Kloss. No. 3391/CBK.

Specimens examined.—Three from the type-locality.

For measurements see table on p. 98.

VI.—On some new or little-known South African Grasshoppers. By B. P. UVAROV, F.E.S., Assistant Entomologist, Imperial Bureau of Entomology.

THE present paper includes descriptions of a number of new or insufficiently known short-horned grasshoppers from the collection sent to the Imperial Bureau of Entomology by the Division of Entomology, Pretoria, and by Prof. J. C. Faure, of the Transvaal University College †, as well as of one new genus found amongst a small, but very interesting, lot sent by Dr. Ch. K. Brain, of the Agricultural College, Stellenbosch.

All the types are preserved in the British Museum, while paratypes of species represented by more than a couple of specimens have been returned to the Division of Entomology, Pretoria, and to the Transvaal University.

Subfamily CATANTOPINÆ.

PRETORIANA, gen. nov. (Fig. 1.)

♀. Rather closely related to the genera *Ichnacrida*, Stål, and *Rhamphacrida*, Karsch. Antennæ feebly ensiform, distinctly but not strongly flattened; each of the joints of the

* Journ. Nat. Hist. Soc. Siam, ii. 1917, p. 272; iii. 1918, pp. 63, 71.

† See my previous paper on the same collection in Ann. & Mag. Nat. Hist. (9) viii. pp. 369-392, October 1921.